

IN THE CLAIMS:

1. (Currently Amended) A computer-readable medium having stored thereon computer-executable instructions for instantiating a forecasting tool for predicting future demand for quantifiable items in connection with a plurality of projects, the tool being instantiated on at least one computer in the form of a database having multiple tables, each of the multiple tables having information therein, wherein instantiating the forecasting tool comprises:

receiving a query from a user to the tool,

accessing the database having multiple tables,

receiving a selection of at least one milestone to be employed with one of the projects,
the at least one milestone originating from a milestone-type table, wherein the milestone is
associated with a change of at least one milestone-related material and the milestone includes an
amount of milestone-related material required for the project and at least one of a projected
milestone start date and a projected milestone end date;

determining an actual milestone date from the milestone-type table;

calculating a material required date of milestone-related material based on the actual
milestone date and at least one of the projected milestone start date and the projected milestone
end date;

determining a supplier for the material from a material table;

obtaining a lead-time for supplying the material based on a suppliers table;

calculating an order date based on the material required date and the lead-time;

determining a response to the query according to the information in the multiple tables,
populating a requirements table according to the determined response calculated order

date, and

outputting the requirements table and the order date to a display, and the multiple tables comprising:

a project table having project information for each project, the project information including at least one of the following: a reference to at least one item to be employed in connection with the project, and an identification of a project-type of the project;

a project-type table having project-type information for each project-type referenced by the project table, the project-type information comprising a list including each item to be employed in connection with the project-type, wherein the list is constructed based on at least one of the following:

at least one telecommunications infrastructure requirement for the project-type;

at least one previous project of a same project-type, and

at least one new material requirement for the project-type based on at least one of the following: at least one new type of construction method, at least one new service, and at least one new regulation;

an item table having item information for each item referenced by the project table, the item information including a reference to an algorithm to be employed to determine a quantity of the item for a particular project;

an algorithm table having algorithm information for each algorithm referenced by the item table,

the requirements table populated by the forecasting tool on a dynamic basis with

information obtained from the multiple tables in response to a query for demand for items, the tool populating the requirements table by accepting the query, traversing the multiple tables of the database according to the query to accumulate data necessary to populate the requirements table, and populating the requirements table based on the accumulated data, wherein the requirements table is output to the display by the forecasting tool for viewing by personnel.

2. (Previously Presented) The medium of claim 1 wherein the quantifiable items are selected from a group consisting of parts, materials, equipment, labor time, and combinations thereof.

3. (Previously Presented) The medium of claim 1 wherein the database tables are distributed across several computers.

4. (Previously Presented) The medium of claim 3 wherein the forecasting tool further comprises a database server for controlling and coordinating the database.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) The medium of claim 6-1 wherein the item information further includes a reference to the milestone information in the milestone table and information on how to calculate a date when the item is required based on the milestone information.

8. (Previously Presented) The medium of claim 1 wherein the item information further includes an identification of at least one supplier, the tables further comprising a supplier table having supplier information for each supplier referenced by the item table, the supplier information including the items supplied by the supplier and information for each supplied item.

9. (Previously Presented) The medium of claim 8 wherein the information for each supplied item is selected from a group consisting of item prices, lead-time necessary for supplying the item, and capacity for supplying the item.

10. (Previously Presented) The medium of claim 1 wherein the algorithm information for each algorithm is selected from a group consisting of: algorithm information that calculates a quantity of an item based on a mathematical calculation and available from the tables of the database; algorithm information that calculates a quantity of an item based on a quantity calculated for another item; algorithm information that refers to a look-up table; and combinations thereof.

11. (Cancelled)

12. (Previously Presented) The medium of claim 1 wherein the requirements table is populated with information including a project, an item for the project, and an amount of the item required for the project.

13. (Previously Presented) The medium of claim 12 wherein the requirements table is further populated with information including the date when the item is needed for the project.

14. (Previously Presented) The medium of claim 13 wherein the requirements table is further populated with information including the date when the item must be ordered to satisfy the date when the item is needed.

15. (Previously Presented) The medium of claim 12 wherein the requirements table is further populated with information including a supplier the item is to be ordered from.

16. (Currently Amended) A computer-readable medium having stored thereon computer-executable instructions which, when executed by a computer, perform a method of employing a forecasting tool for predicting future demand for quantifiable items in connection with a plurality of projects, comprising:

receiving a query for demand for an item,

accepting the query,

receiving a selection of at least one milestone to be employed with one of the projects, the at least one milestone originating from a milestone-type table, wherein the milestone is associated with a change of at least one milestone-related material and the milestone includes an amount of milestone-related material required for the project and at least one of a projected milestone start date and a projected milestone end date;

determining an actual milestone date from the milestone-type table;

calculating a material required date of milestone-related material based on the actual milestone date and at least one of the projected milestone start date and the projected milestone end date;

determining a supplier for the material from a material table;

obtaining a lead-time for supplying the material based on a suppliers table;

calculating an order date based on the material required date and the lead-time;

in response to the query, populating a requirements table on a dynamic basis with the calculated order date information from multiple tables, each of the multiple tables having information therein,

wherein populating the requirements table comprises traversing the multiple tables of the database according to the query to accumulate data necessary to populate the requirements table and populating the requirements table based on accumulated data, wherein traversing the multiple tables and accumulating the data comprises executing instructions configured to:

determine a first item needed for a project from a project table having project information for each project, the project information including at least one of the following: a reference to at least one item to be employed in connection with the project, and an identification of a project-type of the project;

determine the project-type of the project according to the project table, wherein the project-type is associated with a project-type table, the project-type table having project-type information for each project-type referenced by the project table, the project-type information comprising a list including each item to be employed in connection with the project-type,

wherein the list is constructed based on at least one of the following:

at least one telecommunications infrastructure requirement for the project-type;

at least one previous project of a same project-type, and

at least one new material requirement for the project-type based on at least one of the following: at least one new type construction method, at least one new service, and at least one new regulation;

determine a second item needed according to the project type of the project from the project-type table;

determine an algorithm necessary to determine a quantity of the needed item for an item table having item information for each item referenced by the project table, the item information including a reference to an algorithm to be employed to determine a quantity of the item for a particular project;

determine specifics of the necessary algorithm from an algorithm table having algorithm information for each algorithm referenced by the item table;

obtain any inputs necessary for the algorithm from each of the multiple tables as necessary;

apply the inputs to the algorithm to determine the quantity of the needed item; and
output the populated requirements table and the order date for viewing.

17. (Cancelled)

18. (Cancelled)

19. (Previously Presented) The medium of claim 16 wherein the item information further included an identification of at least one supplier, the tables further comprising a supplier table having supplier information for each supplier referenced by the item table, the supplier information including the items supplied by the supplier and information for each supplied item, the method comprising:

from the items table, determining a supplier of the needed item;

from the supplier table, obtaining lead-time information for supplying the item; and

calculating an order date based on an item requirement date and the lead-time information.

20. (Currently Amended) A computer-readable medium having stored thereon computer-executable instructions for instantiating a forecasting tool for predicting future demand for quantifiable items in connection with a plurality of projects, the tool being instantiated on at least one computer in the form of a database having multiple tables, each of the multiple tables having information therein, wherein instantiating the forecasting tool comprises:

receiving a query,

accessing the database having multiple tables,

receiving a selection of at least one milestone to be employed with one of the projects, the at least one milestone originating from a milestone-type table, wherein the milestone is associated with at least one milestone-related material and the milestone includes an amount of milestone-related material required for the project and at least one of a projected milestone start date and a projected milestone end date;

determining an actual milestone date from the milestone-type table;

calculating a material required date of milestone-related material based on the actual milestone date and at least one of the projected milestone start date and the projected milestone end date;

determining a supplier for the material from a material table;

obtaining a lead-time for supplying the material based on a suppliers table;

calculating an order date based on the material required date and the lead-time;

determining a response to the query according to the information in the multiple tables;

populating a requirements table according to the determined response-calculated order date, and

outputting the requirements table to a display, and the multiple tables comprising:

a project table having project information for each project, the project information including a reference to at least one item to be employed in connection with the project;

an item table having item information for each item referenced by the project table, the item information including a reference to an algorithm to be employed to determine a quantity of the item for a particular project; and

an algorithm table having algorithm information for each algorithm referenced by the item table,

the multiple tables further comprising a requirements populated by the forecasting tool on a dynamic basis with information obtained from the multiple tables in response to a query for demand for items, the tool populating the requirements table by accepting the query, traversing the multiple tables of the database according to the query to accumulate data necessary to

populate the retirements table, and populating the requirements table based on the accumulated data,

the project information further including and identification of a project-type of the project, the tables further comprising a project-type table having project-type information for each project-type referenced by the project table the project-type information comprising a list including each item to be employed in connection with the project-type, wherein the list is constructed based on at least one of the following:

at least one telecommunications infrastructure requirement for the project-type;

at least one previous project of a same project-type, and

at least one new material requirement for the project-type based on at least one of the following: at least one new type of construction method, at least one new service, and at least one new regulation,

~~the project information further including at least one milestone date for the project, the tables further comprising a milestone table having milestone information for each milestone date referenced by the project table, the milestone information including at least one key project moment to which a need for an item for the project is referenced,~~

the item information further including a reference to the milestone information in the milestone table and information on how to calculate a date when the item is required based on the milestone information,

the item information further including an identification of at least one supplier, the tables further comprising a supplier table having supplier information for each supplier referenced by the item table, the supplier information including the items supplied by the supplier and information for each supplied item,

the requirements table being populated with information including a project, and item for the project, and an amount of the item required for the project,

the requirements table being further populated with information including the date when the item is needed for the project,

the requirements table being further populated with information including the date when the item must be ordered to satisfy the date when the item is needed,

the requirements table being further populated with information including a supplier the item is to be ordered from, wherein the requirements table is outputted for viewing by personnel.

21. (Currently Amended) A computer-readable medium having stored thereon computer-executable instructions for instantiating a forecasting tool wherein instantiating the forecasting tool comprises:

receiving a query,

accessing a database having multiple tables, each of the multiple tables table having information therein,

receiving a selection of at least one milestone to be employed with one of the projects, the at least one milestone originating from a milestone-type table, wherein the milestone is associated with a change of at least one milestone-related material and the milestone includes an amount of milestone-related material required for the project and at least one of a projected milestone start date and a projected milestone end date;

determining an actual milestone date from the milestone-type table;

calculating a material required date of milestone-related material based on the actual milestone date and at least one of the projected milestone start date and the projected milestone

end date;

determining a supplier for the material from a material table;

obtaining a lead-time for supplying the material based on a suppliers table;

calculating an order date based on the material required date and the lead-time;

determining a response to the query according to the information in the multiple tables;

populating a requirements table according to the ~~determined response~~ calculated order

date, and

outputting the requirements table to a display, the forecasting tool comprising the multiple tables for predicting future demand for quantifiable items in connection with a plurality of projects, wherein the plurality of projects are related to installation projects in the communications industry, the multiple tables comprising:

a project table having project information for each project, the project information including a reference to at least one item to be employed in connection with the project;

an item table having item information for each item referenced by the project table, the item information including a reference to an algorithm to be employed to determine a quantity of the item for a particular project; and

an algorithm table having algorithm information for each algorithm referenced by the item table, the requirements table populated by the forecasting tool on a dynamic basis with information obtained from the multiple tables in response to a query for demand for items, the tool populating the requirements table by accepting the query, traversing the tables of the database according to the query to accumulate data necessary to populate the requirements table, and populating the requirements table based on the accumulated data, wherein the requirements table is output to the display by the forecasting tool for viewing by personnel, further wherein the

query input into the forecasting tool is modifiable,

the project information further including an identification of a project-type of the project, the multiple tables further comprising a project-type table having project-type information for each project-type referenced by the project table, the project-type information comprising a list including each item to be employed in connection with the project-type, wherein the list is constructed based on at least one of the following:

at least one telecommunications infrastructure requirement for the project-type comprising at least one of: distribution equipment, subscriber service equipment, central office equipment, and intermediate breakout equipment;

at least one previous project of a same project-type, and

at least one new material requirement for the project-type based on at least one of the following: at least one new type construction method, at least one new service, and at least one new regulation,

~~the project information further including at least one milestone date for the project, the multiple tables further comprising a milestone table having milestone information for each milestone date referenced by the project table, the milestone information including at least one key project moment to which a need for an item for the project is referenced;~~

the item information further including a reference to the milestone information in the milestone table and information on how to calculate a date when the item is required based on the milestone information,

the item information further including an identification of at least one supplier, the tables further comprising a supplier table having supplier information for each supplier referenced by the item table, the supplier information including the items supplied by the supplier and

information for each supplied item,

the requirements table being populated with information including a project, an item for the project, and an amount of the item required for the project,

the requirements table being further populated with information including the date when the item is needed for the project,

the requirements table being further populated with information including the date when the item must be ordered to satisfy the date when the item is needed,

the requirements table being further populated with information including a supplier the item is to be ordered from, wherein the requirements table based on the accumulated knowledge is viewed by personnel..